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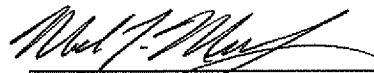
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in the following listed application(s) or patent(s) for which the issue fee has been paid.

<u>Patent No.</u>	<u>Serial No.</u>	<u>Patent Date</u>	<u>US Filing Date</u>	<u>Confirmation No.</u>	<u>Attorney Docket No.</u>
7,425,937B2	10/633,964	09/16/2008	08/04/2003	5167	0553-0376

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**(12) United States Patent
Inukai****(10) Patent No.: US 7,425,937 B2
(45) Date of Patent: Sep. 16, 2008****(54) DEVICE AND DRIVING METHOD THEREOF****(75) Inventor: Kazutaka Inukai, Kanagawa (JP)****(73) Assignee: Semiconductor Energy Laboratory
Co., Ltd. (JP)****(*) Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 10 days.

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Primary Examiner—Prabodah Dharia*(74) Attorney, Agent, or Firm*—Cook Alex Ltd.**(51) Int. Cl.****G09G 3/30** (2006.01)**(52) U.S. Cl.** 345/76**(58) Field of Classification Search** 345/204,
345/205, 206, 87–99, 100, 76
See application file for complete search history.**(57) ABSTRACT**

To provide a display device and its driving method free from lack of writing time, which usually accompanies an increase in size of a display device and enhancement in definition. Therefore, there is provided a display device and a driving method in which x (x is a natural number equal to or larger than 4) data lines are placed in each column to simultaneously supply video signals to x pixels through the x data lines. The present invention makes it possible to supply video signals to x pixels simultaneously as opposed to conventional dot sequential driving where a signal is supplied to one pixel at a time. Furthermore, a display device of the present invention and its driving method make it possible to supply video signals to $(x \times n)$ pixels at once as opposed to conventional linear sequential driving where only n pixels in the first to last (the last column is the n -th column) columns receive signals simultaneously. Thus the present invention can make the speed of writing video signals in pixels x times faster than prior art.

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39 Claims, 14 Drawing Sheets